



# K600G, the digital breakthrough

Hi-Res Digital Printing for the Life Sciences Industry



It's time to change to the most advanced blister foil and web printing solution. It's time to upgrade to the **K600G**

Domino. Do more.

# Your partners in Patient Safety and Compliance

## Protect your customers and your brand with a leading digital printing system

The **K600G** has been designed to ensure the highest levels of product traceability using hi-res digital printing, and features like batch recording and advanced vision integration capability, achieving serialisation at a pocket-level. This allows for adapting your production line to meet the ever increasing legislative demands and future proofing your line.

## Ensure traceability with safer inks that last

But traceability also requires that any code stays perfectly readable throughout the entire product's shelf life. To achieve this level of endurance, we combine the usage of Domino inks, developed to ensure superior adhesion and contrast, and a Corona pre-treatment to enhance surface energy. The result, increased adhesion for high-quality and durable codes.

As members of EuPIA, we take ink safety very seriously. The Domino Fluids Team develops our inks following strict quality management systems, achieving a CMR-compliant, with a low ink migration rate portfolio, including a range of aqueous inks.

## No more undetected coding errors

The **K600G** can incorporate a vision system to detect errors as they happen. Eliminating undetected coding errors will not only reinforce patient safety and protect your brand and business, but also will reduce unplanned downtime, reduce waste drastically and improve your OEE.



# Native 600dpi and different drop sizes for superior printing quality

## The highest dpi of the market

The **K600G** offers native 600dpi and different drop sizes to achieve an excellent grayscale capability and smart ink usage. This ensures that the final result always meets the most demanding requirements and also reduces consumable costs. The **K600G** can print high-quality digital variable data, alpha-numeric text, a range of barcodes and 2D codes as well as graphics in a range of different substrates like blister foil, tyvek, medical paper, cardboard...

## i-Tech StitchLink

To adapt to the most demanding requirements, the print widths range from a single print module, covering 108mm (4.25") up to seven dual print modules with a print width of 782mm (30.81").

Print head alignment and image stitching is achieved through the Domino **i-Tech StitchLink** micro-motor controller technology. It is easy and accurate for rapid set up of high quality images.



# Maximise your productivity with Pharma 4.0

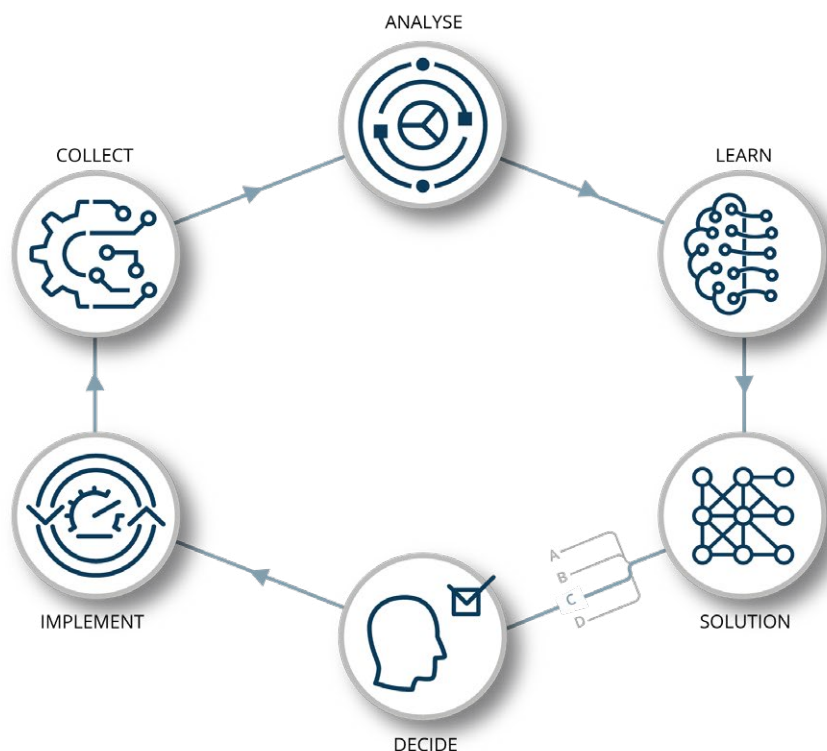
The digitalisation of your printing process also means a more efficient and leaner production. The **K600G** can increase your OEE, reduce your costs and optimise your resources thanks to the implementation of Pharma 4.0 principles.

## Do more doing less

Pharma 4.0 is a groundbreaking technology shift by the pharmaceutical manufacturing industry and will become a standard for the sector soon.

Using Artificial Intelligence, the **K600G** collects, analyses and uses data to optimise your production. It continuously reviews the system to find improvable performance areas, increase system's stability or even analyse usage patterns to predict problems in advance.

This will also give you more flexibility to cope with traditionally challenging tasks like printing small batches, working with different SKUs or adapt the production to follow fluctuating market trends.



# Reduce operator intervention to a minimum

## Automate maintenance with **i-Tech CleanCap**

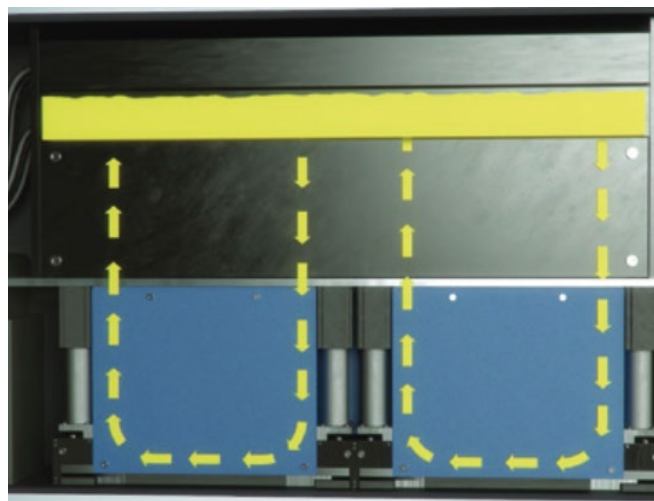
Reducing operator intervention not only means a more efficient time usage, it also reduces drastically the possibility of human errors. The revolutionary **i-Tech CleanCap** automated print head cleaning and capping technology means the **K600G** almost maintains itself, reducing operator work to a minimum. **CleanCap** is a clean and consistent controlled process: the print nozzles are purged to ensure optimal print quality and wiper blades clear remaining ink from the print head modules. Blades are then washed to ensure their performance is maintained. This automated cleaning cycle eliminates time-consuming daily manual print head cleaning with the risk of print head nozzle blockage or print head damage being dramatically reduced.

When not in operation the print head is automatically moved into the **CleanCap** where the head is wiped and capped. Your **K600G** will be ready for the next use.



## Minimise risks with **i-Tech ActiFlow**

Smart preventative maintenance is key to ensure the correct and efficient functioning of your equipment. In other words, prevention is better than cure and this is achieved through design. The unique Domino **i-Tech ActiFlow** ink circulation system ensures that the ink is always moving around the printhead, even when it has stopped printing. This degasses the ink preventing air bubbles forming that can impact nozzle performance. **ActiFlow** maintains consistent and reliable print results and reduces operator intervention.

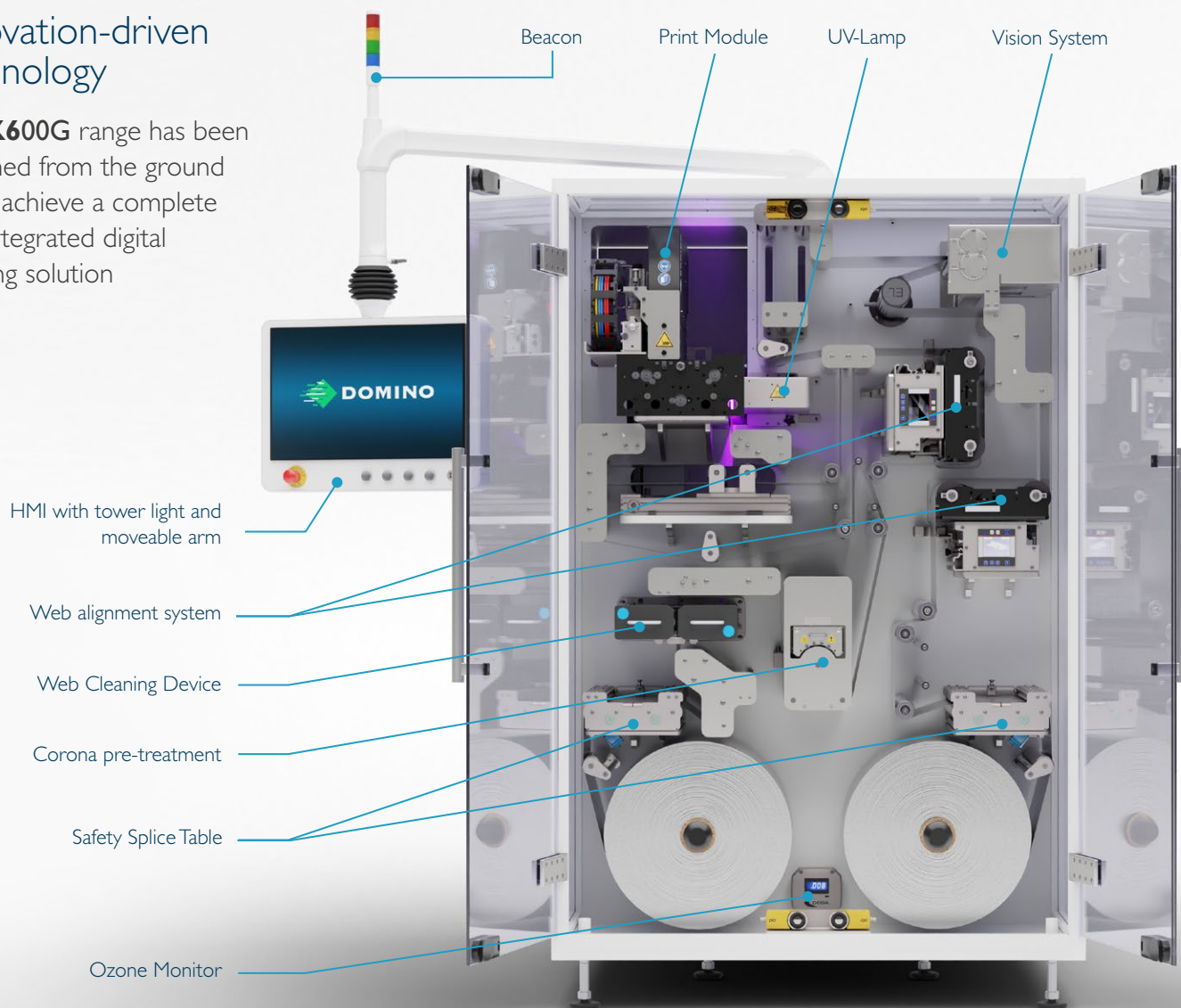




# Thoroughly designed

## Innovation-driven technology

The **K600G** range has been designed from the ground up to achieve a complete and integrated digital printing solution



### Improved Safety

We have prioritised operator safety, developing new and unique equipment for the **K600G**. Systems like the Safety Splice Table or the Ozone monitor are combined to minimise risks.



### Improved OEE

The whole **K600G** range is designed to improve your production efficiency. Batch printing has been taken to a new level of quality, accuracy and efficiency securing your OEE.



### Improved Print Quality

A high resolution print is key. But we have gone further. Pre- and post-treatment and web-alignment and web-cleaning systems optimise also the substrate to achieve the best result possible.

# Multiple versions to meet your specific needs



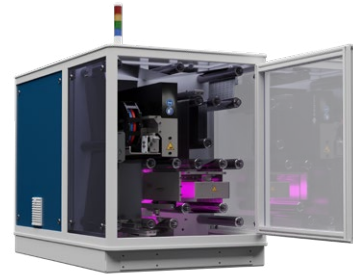
## **K600G** Off-Line (OL)

The **K600G** OL performs high speed, high resolution batch printing to enhance your production efficiency. Its new to market offline blister reject tracking by linear barcode allows for 100% accurate rejects within all blister machines. Simply print and track in the **K600G** OL printer; then transfer the roll and reject within your blister machine.

- Print speed at 60m/min
- Integrated advanced vision system can be connected to the shift register of each blister line
- Ready for Digital Transformation
- Reduction of running costs

## **K600G** Near-Line (NL)

The **K600G** NL can be installed next to the selected line to feed the blistering machine directly, while keeping optional roll-to-roll capabilities.



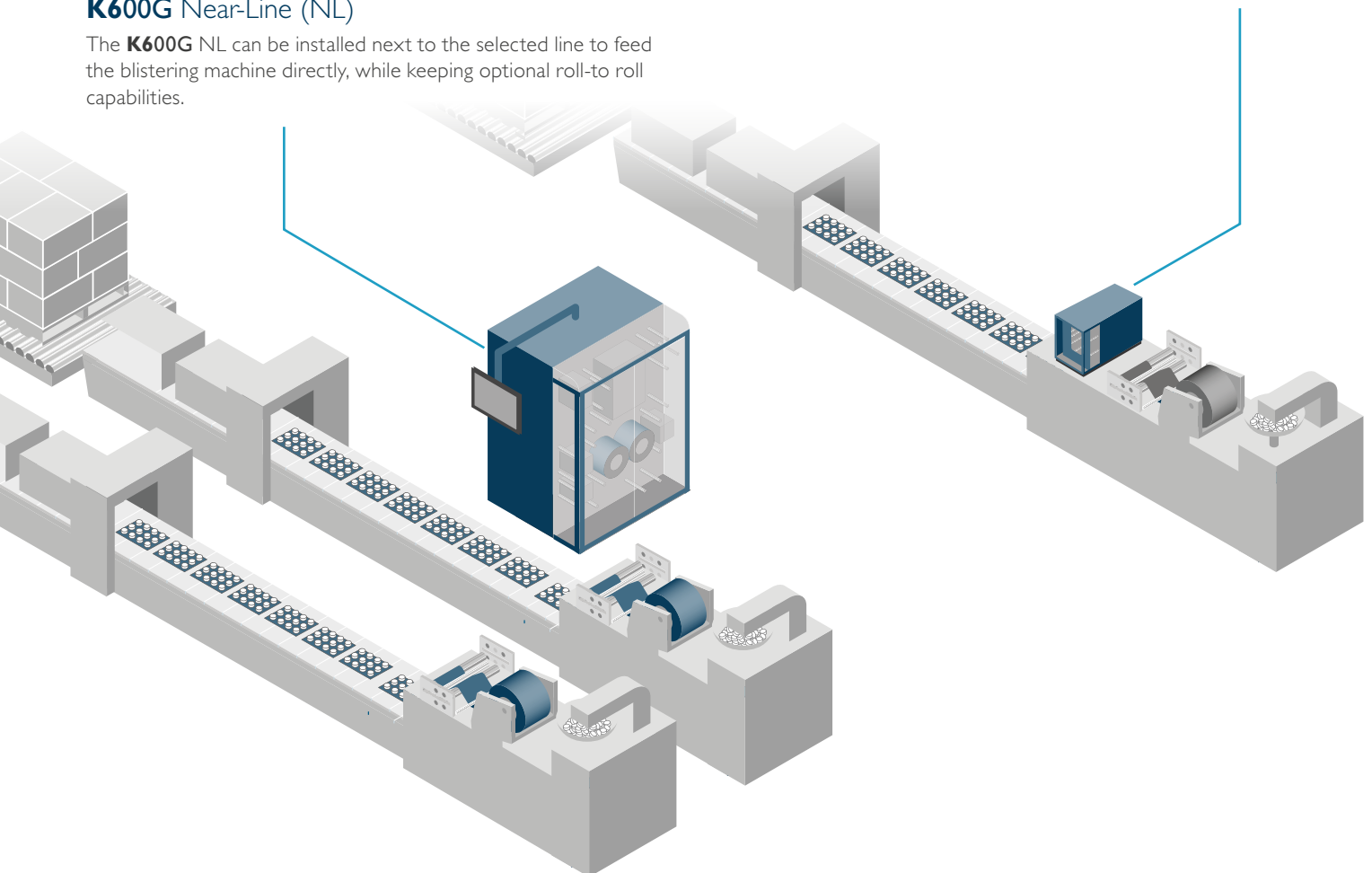
## **K600G** Top-Of-Line Compact (TOLc)

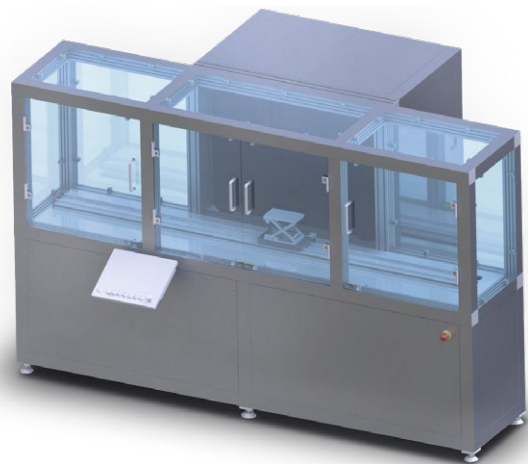
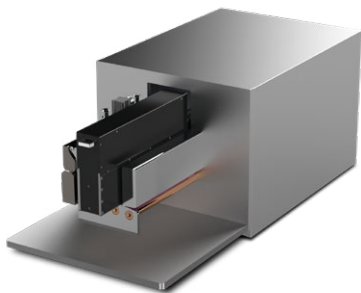
Flexible and compact, the **K600G** TOLc has been designed for easy integration on top of a blister packing line.

- Dancing arm
- Splice detection sensor
- Web alignment

## **K600G** Top-Of-Line Advanced (TOLa)

Can be upgraded to the TOL advanced version with Corona pre-treatment, web-cleaning and advanced vision system integrated in the printer chamber.





### **K600G** Integrated-Line (IL)

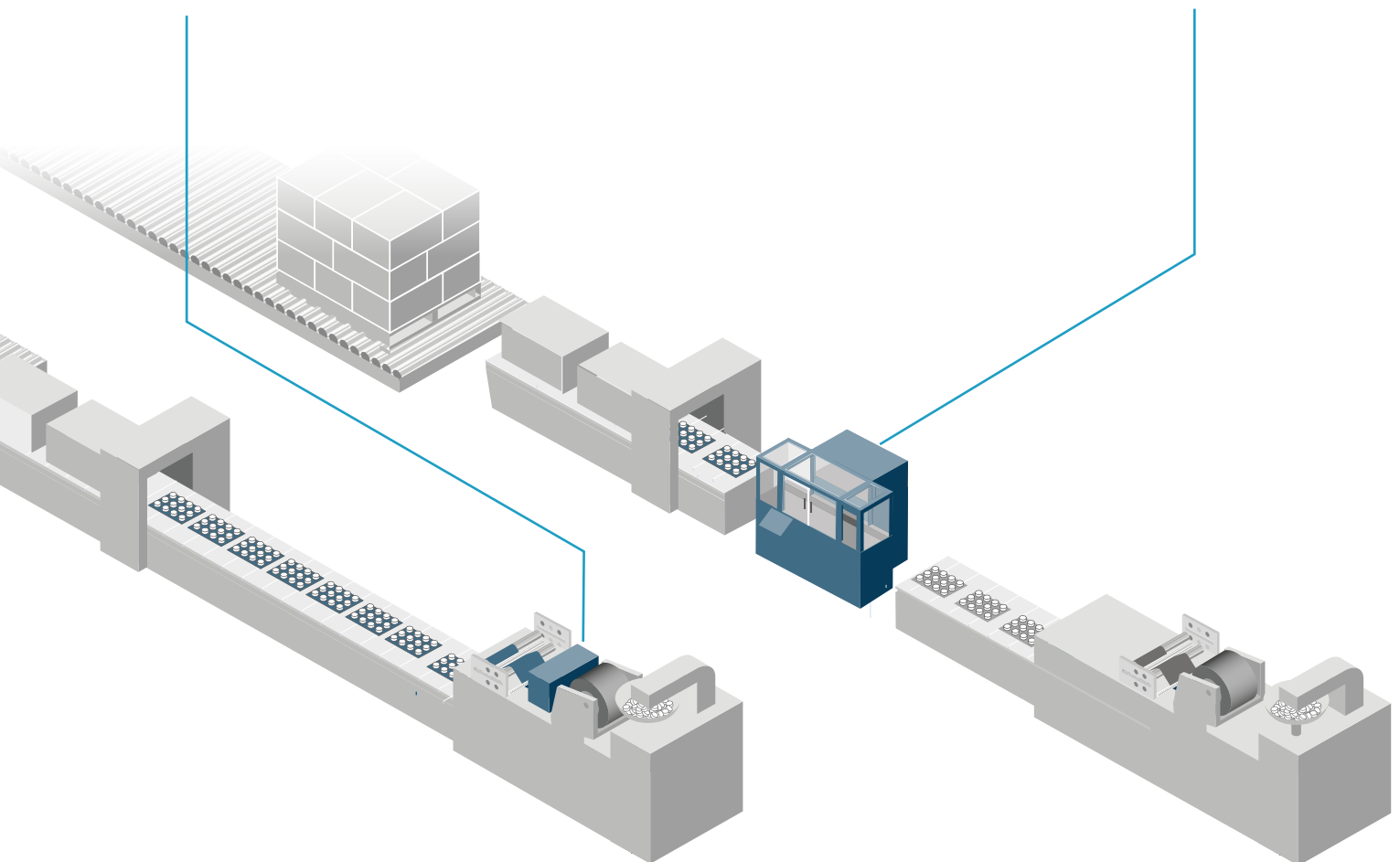
Designed for deep-integration into any kind of blister packing machines, the **K600G** IL is especially recommended for new lines, but can be easily integrated in existing machines.

- Small footprint
- Modular design
- Web applications pre-sealing or post-sealing
- Can be installed on top of an existing product handling in late-stage-customization machines
- Full integration with trained Project Management Organisation

### **K600G** Sealed-Blister-Coding-Station (SBCS)

Created for printing on already sealed blisters for maximum flexibility, the **K600G** SBCS can add customisation at a late stage on each blister, like regional adaptations or customer information.

- Different types of product handling systems available to ensure high print quality even on difficult substrates
- Multiple infeed options available
- Pre-print format inspection
- Print quality check
- Rejection capability
- Multiple outfeed options available



# A partnership of leading experts

## Domino Printing Sciences

Founded in 1978, Domino Printing Sciences has established a global reputation for the development and manufacture of coding, marking and printing technologies, as well as its worldwide aftermarket products and customer service.



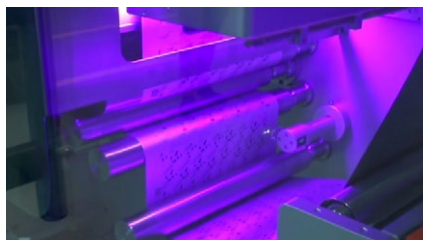
## SeaVision

Since 1995 we provide top-quality vision systems solutions to Pharmaceutical companies and packaging machine manufacturers. Innovation, flexibility and service are our answers to customer's needs.



## See it in action

### Product Video

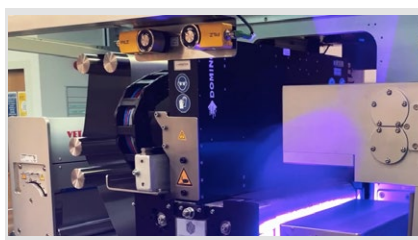


A quick overview of the main **K600G** features and benefits.



<https://domino-na.wistia.com/medias/xxgbke3tdl>

### Product Overview

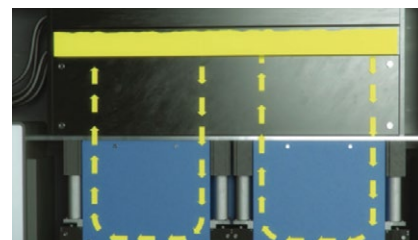


Introduction to the **K600G** system, variants and operation.



<https://domino-na.wistia.com/medias/9hjkilpm9g>

### Automated Maintenance



How do **Actiflow** and **CleanCap** work? This animation shows the systems' internal processes.



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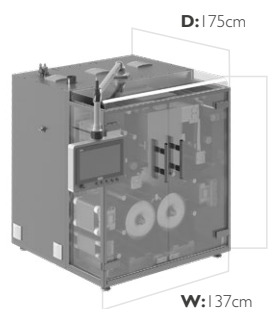
## BOOK A LIVE DEMO

[Lifesciences@domino-printing.com](mailto:Lifesciences@domino-printing.com)

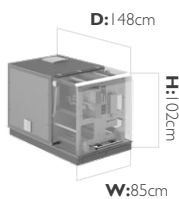


## Technical specification

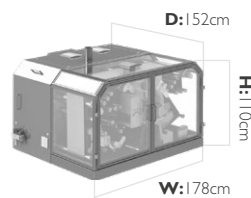
	K600G OL/NL	K600G TOLc	K600G TOLa	K600G IL	K600G SBCS
<b>Operational Capability</b>					
Maximum line speed standard	60m/min (197ft/min)				
Physical print resolution	300dpi - 600dpi				
Nominal drop sizes	6, 7, 11, 14pl (14pl drop only available at reduced speeds)				
Image width range	108mm (4.25") to 782mm (30.81")				
Material width	20mm (0.79") to 800mm (31.49")				
Print direction	Left to Right, Right to Left				
Media	Coated and uncoated paper, foil and plastic				Already sealed blisters
<b>Ink System</b>					
Ink Supply	1 - 10 litres (ink dependent)				
Ink Type	LED Curable / CMR-compliant / Aqueous				
<b>Standard features</b>	Automotive cleaning, <b>i-tech StitchLink</b> , grey scale capability, different drop-sizes, UV-lamp air-cooled, UV- lamp run-time guaranteed 30,000 hours or 3 years, easy and immediate print image switch, easy switch over on batches, code library, variable and fixed print images				
	Splice table UV web buffer Web tension control Innovative reject tracking transferred to Blister machine	Reduced size vs.TOL advanced	Web tension control Optional corona Optional web cleaning	Fits within thermoforming and blister machines	Multi-carrier Vacuum belt IIOT Smart tracking Various infeed/outfeed options etc.
<b>Key Dimensions</b>					
Print width 108mm (4.25")	W:137cm D:175cm H:214cm	W:85cm D:148cm H:102cm	W:178cm D:152cm H:110cm	W:50cm D:135cm H:50cm	Variable, project dependent
Ink cabinet and controller unit		W:60cm D:60cm H:160cm	W:60cm D:60cm H:160cm		
<b>Services</b>					
Electrical	400-480V 16A, operation dependent				
Compressed Air	6-8bar				
<b>Environment</b>					
Temperature range	20-30°C (68-86°F)				
Optimum temperature	21°C (70°F)				
Humidity range	40-60%				
<b>Ancillary Equipment</b>	UV dryer; LED UV pinning, infrared dryer web cleaner; web guide, dancing arm foil management, Anti-static bars, vibration protection frame, Web extension, Corona pre-treatment, vision inspection integration (print detection / barcode reader / ready for serialization), front frame upgrade to stainless steel, splice detection sensor				
<b>Industry 4.0 (Pharma 4.0)</b>	OT Cyber Secure by Design, AI/Machine Learning, Line Scada System - Batch Manager, Edge Gateway (OPC-UA, MQTT output, etc.), etc.				
<b>Documentation</b>	Standard Documentation Package according to V-Model available in English and additional languages				



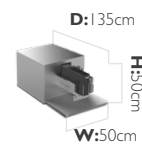
**K600G OL**



**K600G TOLc**



**K600G TOLa**



**K600G IL**